fractions Sideways, I tried what would be the Effects of ſuch a ſecond Refraction. For this end I ordered all things as in the third Experiment, and then placed a ſecond Priſm immediately after the firſt in a croſs Poſition to it, that it might again refract the beam of the Sun's Light which came to it through the firſt Priſm. In the firſt Priſm this beam was refracted upwards, and in the ſecond Sideways. And I found that by the Refraction of the ſecond Priſm the breadth of the Image was not increaſed, but its ſuperior part which in the firſt Priſm ſuffered the greater Refraction and appeared violet and blew, did again in the ſecond Priſm ſuffer a greater Refraction than its inferior part, which appeared red and yellow, and this without any Dilation of the Image in breadth.

*Fig.* 14. *Illuſtration.* Let S repreſent the Sun, F the hole in the Window, A B C the firſt Priſm, D H the ſecond Priſm, Y the round Image of the Sun made by a direct beam of Light when the Priſms are taken away, P T the oblong Image of the Sun made by that beam paſſing through the firſt Priſm alone when the ſecond Priſm is taken away, and *pt* the Image made by the croſs Refractions of both Priſms together. Now if the Rays which tend towards the ſeveral Points of the round Image Y were dilated and ſpread by the Refraction of the firſt Priſm, ſo that they ſhould not any longer go in ſingle Lines to ſingle Points, but that every Ray being ſplit, ſhattered, and changed from a Linear Ray to a Superficies of Rays diverging from the Point of Refraction, and lying in the Plane of the Angles of Incidence and Refraction, they ſhould go in thoſe Planes to ſo many Lines reaching almoſt from one end of the Image P T to the other, and if that Image ſhould thence become oblong : thoſe Rays and their ſeveral parts tending towards the ſeveral Points of the